

NTAB

Attachment B

Legend: **NA** (not applicable) refers to activities performed by the CLEC or where there is no applicability to the column. **R** refers to the costs of activities that are recovered elsewhere (i.e. other than non-recurring) such as recurring costs.

NRC Model
Activity Descriptions

Step	Task / Activity	Task / Activity Description	Probability Rationale / Formula	Time (Min.)	Rate (Work Center)
1	PRE-ORDER STEPS				
2	CLEC customer contact	Customer service representative obtains the service address, customer name, and customer service requests.	NA	NA	NA
3	CLEC requests customer address data, CSR, and appointment from ILEC	CLEC representative requests service address information from the customer and then inputs that information into the gateway to confirm that the service address is listed in the ILEC's databases. For migrating customers, the CLEC also requests additional customer information that is found in the Customer Service Record which is stored by the ILEC.	NA	NA	NA
4	ILEC gateway requests address data from Administrative Information System and CSR	The gateway processes the CLEC service request by obtaining Customer Service Record information from the Administrative Information System.	100%	-	
5	ILEC gateway formats & returns address, CSR, and appointment data to CLEC	The gateway passes address verification and CSR information back to CLEC.	100%	-	
6	ORDERING STEPS				
7	CLEC customer service representative	CLEC creates Local Service Request (LSR) from information gathered from	NA	NA	NA

Step	Task / Activity	Task / Activity Description	Probability Rationale / Formula	Time (Min.)	Rate (Work Center)
	inputs LSR information into LOS	the customer and ILEC CSR (if available).			
8	ILEC gateway receives, validates and logs LSR, returns FOC, and passes LSR to SOG	The gateway receives, validates and logs the Local Service Request (LSR). At this point, if erroneous information was input into the LSR, the gateway would return the order to a CLEC service representative who would have to correct, then re-input the order. If the order is valid, the ILEC confirms that the order is complete by sending the CLEC a Firm Order Commitment to the CLEC. The ILEC then passes the LSR back to its Service Order Generator (SOG) for further down-stream processing.	100.0%	-	
9	CLEC gateway sends LSR to EXACT	EXACT validates service order request and transmits to TUF.	100%	-	
10	ILEC SOG retrieves CSR data, formats and passes to SOP	The ILEC's SOG receives the LSR data from the gateway and generates a service order (e.g., formats the LSR data into a service order) which is passed to the Service Order Processor (SOP) for processing.	100%	-	
11	PROVISIONING PROCESSING STEPS				
12	EXACT and TUF sends request to SOP	TUF is the OSS which translates the USOCs and FIDs that are required; then sends to the ILEC SOP.	100%	-	
13	SOP sends request to SOAC	The ILEC Service Order Processor receives a service order and passes the service order to the SOAC-like system. If the service order is not	100%	-	

Step	Task / Activity	Task / Activity Description	Probability Rationale / Formula	Time (Min.)	Rate (Work Center)
		properly formatted, SOAC will send the service order back to an ILEC service rep for correction.			
14	SOAC analyzes order, generates assignment requests for OSP, COE, IOF, etc.	SOAC analyzes the service order and sends assignment request to the inventory systems e.g., LFACS, SWITCH, and TIRKS	100%	-	
15	SOAC analyzes order, generates assignment requests for COE and IOF, etc.	SOAC analyzes the service order and sends assignment request to the inventory systems e.g., SWITCH, and TIRKS	100%	-	
16	LFACS makes OSP assignments, e.g., cable and pair	LFACS commits OSP facilities for the assignment request and then sends back to SOAC.	100%	-	
17	LFACS makes OSP spare and available for reassignments, e.g., cable and pair	LFACS spares up OSP facilities for re-assignment.	100%	-	
18	SWITCH provides equipment and facility assignments	SWITCH commits central office equipment for the assignment request and then sends it back to SOAC.	100%	-	
19	SWITCH inventories as spare and shows available for re-assignment (equipment and facility)	SWITCH spares up central office equipment for the reassignment	100%	-	
20	SOAC receives COE, OSP, IOF, etc.	SOAC receives information back from LFACS, SWITCH, and TIRKS.	100%	-	
21	SOAC receives COE and IOF, etc.	SOAC re-assembles the pieces of information and formulates the customer vertical features (call forwarding, call waiting, etc.) based on customer service demands which	100%	-	

Step	Task / Activity	Task / Activity Description	Probability Rationale / Formula	Time (Min.)	Rate (Work Center)
		are recorded in USOCs and FIDs. SOAC then forwards this information to MARCH.			
22	COSMOS / SWITCH assigns OE	COSMOS/SWITCH commits central office equipment for the assignment request and then sends it back to SOAC.	=Copper_Percent	-	
23	COSMOS / SWITCH removes OE	COSMOS/SWITCH spares up central office equipment for the reassignment	=Copper_Percent	-	
24	SWITCH assigns IDT port	SWITCH commits LDS ports	=Fiber_Percent	-	
25	SWITCH assigns call reference values (CRV)	CPU processing time	100%	-	
26	SWITCH deletes call reference values (CRV)	CPU processing time	100%	-	
27	SOAC delivers recent change translation information	SOAC re-assembles the pieces of information and formulates the customer vertical features (call forwarding, call waiting, etc.) based on customer service demands which are recorded in USOCs and FIDs. SOAC then forwards this information to MARCH.	100%	-	
28	SOAC delivers recent change disconnect information	SOAC notifies MARCH of disconnect	100%	-	
29	MARCH updates LDS	MARCH updates the Local Digital Switch (LDS) with information about the features and services that the customer has requested.	100%	-	

Step	Task / Activity	Task / Activity Description	Probability Rationale / Formula	Time (Min.)	Rate (Work Center)
30	SOAC delivers equipment and facility information to NSDB	TIRKS transmits a formatted electronic "word document" which contains the assignment and other information to the Network and Services Database and to the Work Force Administration Control	=Fiber_Percent	-	
31	SOAC delivers equipment and facility information to NSDB (100%)	TIRKS transmits a formatted electronic "word document" which contains the assignment and other information to the Network and Services Database and to the Work Force Administration Control	100%	-	
32	NSDB downloads assignments to OPS/INE	NSDB stores active record and passes the appropriate assignments to Operations Systems/Intelligent Network Elements (OPS/INE). OPS/INE takes the information from NSDB and updates specific INE's.	=Fiber_Percent	-	
33	NSDB downloads assignments to OPS/INE	NSDB stores active record and passes the appropriate assignments to Operations Systems/Intelligent Network Elements (OPS/INE). OPS/INE takes the information from NSDB and updates specific INE's.	100%	-	
34	OPS/INE delivers cross connect and equipment provisioning message to INE	Operations Systems sends a message to the actual Intelligent Network Element and tells it to make certain changes to establish a circuit.	=Fiber_Percent	-	
35	OPS/INE delivers cross connect and equipment provisioning message to INE	Operations Systems sends a message to the actual Intelligent Network Element and tells it to make certain changes to establish a circuit.	100%	-	

Step	Task / Activity	Task / Activity Description	Probability Rationale / Formula	Time (Min.)	Rate (Work Center)
36	OPS/INE delivers disconnect message to INE	After the INE has been updated, the INE sends a positive acknowledgment back to OPS/INE which then forwards this acknowledgment back to WFA/C.	=Fiber_Percent	-	
37	OPS/INE delivers disconnect message to INE	After the INE has been updated, the INE sends a positive acknowledgment back to OPS/INE which then forwards this acknowledgment back to WFA/C.	100%	-	
38	OPS/INE updates WFA/C	After the INE has been updated, the INE sends a positive acknowledgment back to WFA/C.	=Fiber_Percent	-	
39	OPS/INE updates WFA/C	After the INE has been updated, the INE sends a positive acknowledgment back to WFA/C.	100%	-	
40	WFA/C updates NSDB	WFA/C forwards acknowledgment received from INE back to NSDB.	=Fiber_Percent	-	
41	WFA/C updates NSDB	WFA/C forwards acknowledgment received from INE back to NSDB.	100%	-	
42	PICS sends plug-in assignments to TIRKS	PICS sends correct plug-in to TIRKS for specific service	100%		
43	TIRKS provides equipment and facility assignments	TIRKS receives request from SOAC for trunk and high capacity service information. TIRKS inventories equipment and assigns the required resources to S.O. This step is only performed for special services, interoffice facilities, high capacity services, etc.	100%	-	
44	TIRKS inventories as spare and shows available for re-assignment (equipment and facility)	TIRKS spares up equipment and facilities to allow for reassignment	100%	-	

Step	Task / Activity	Task / Activity Description	Probability Rationale / Formula	Time (Min.)	Rate (Work Center)
45	TIRKS updates SOAC	After TIRKS has assigned equipment, it sends an assignment completion status to SOAC and forwards an electronic "word document" to WFA/DI (DO) and NSDB.	100%	-	
46	CPU time for NMA for PM data from test	NMA monitors certain network elements for reliability purposes	100%	-	
47	PULL AND ANALYZE ORDER STEPS				
48	Pull and analyze order: FCC; (copper %)	Technician in the CO prints and analyzes the order	=Copper_Percent	2.50	FCC
49	Pull and analyze order: FCC; (copper %*(%_Non_Dedicated))	Technician in the CO prints and analyzes the order	=Copper_Percent*Percent_Non_Dedicated	2.50	FCC
50	Pull and analyze order: FMAC	Technician in the CO prints and analyzes the order	100%	2.50	FMAC
51	Pull and analyze order: SS I & M/OSP	Installation Technician prints and analyzes the order	100%	2.50	SS I&M/OSP
52	Pull and analyze order: NTEC; (copper %)	Technician in the CO prints and analyzes the order	=Copper_Percent	2.50	NTEC
53	Pull and analyze order: NTEC	Technician in the CO prints and analyzes the order	100%	2.50	NTEC
54	Pull and analyze order: SSC	Technician in the SSC analyzes the order	100%	2.50	SSC
55	TRAVEL TIME STEPS				
56	Travel time to the central office; CO Unstaffed, # Orders per Trip, Copper	When a CO is not staffed a technician must be dispatched to the CO (assumes the technician will perform a # of functions at the same CO)	=CO_Non_Staffed/Number_of_Orders_Per_Trip*Copper_Percent	20.00	FCC

Step	Task / Activity	Task / Activity Description	Probability Rationale / Formula	Time (Min.)	Rate (Work Center)
57	Travel time to the central office: CO Unstaffed, # Orders per Trip, Copper, % Non_Dedicated	When a CO is not staffed a technician must be dispatched to the CO (assumes the technician will perform a # of functions at the same CO)	=CO_Non_Staffed/Number_of_Orders_Per_Trip*Copper_Percent*Percent_Non_Dedicated	20.00	FCC
58	Travel time to the central office: CO Unstaffed, # Orders per Trip	When a CO is not staffed a technician must be dispatched to the CO (assumes the technician will perform a # of functions at the same CO)	=CO_Non_Staffed/Number_of_Orders_Per_Trip	20.00	FMAC
59	Travel time to the central office: CO Unstaffed, # Orders per Trip: "R"	When a CO is not staffed a technician must be dispatched to the CO (assumes the technician will perform a # of functions at the same CO)	=CO_Non_Staffed/Number_of_Orders_Per_Trip	20.00	FMAC
60	Travel time to the central office: CO Non Staffed/ Orders per Trip* Copper %	When a CO is not staffed a technician must be dispatched to the CO (assumes the technician will perform a # of functions at the same CO)	=CO_Non_Staffed/Number_of_Orders_Per_Trip*Copper_Percent	20.00	FMAC
61	Travel time to the central office: CO Non Staffed/ Orders per Trip* Copper %	When a CO is not staffed a technician must be dispatched to the CO (assumes the technician will perform a # of functions at the same CO)	=CO_Non_Staffed/Number_of_Orders_Per_Trip*Copper_Percent	20.00	NTEC
62	Travel time to the central office: CO Non Staffed/ Orders per Trip* Copper %: "R"	When a CO is not staffed a technician must be dispatched to the CO (assumes the technician will perform a # of functions at the same CO)	=CO_Non_Staffed/Number_of_Orders_Per_Trip*Copper_Percent	20.00	NTEC
63	Travel time to the central office: CO Non Staffed/ Orders per Trip* Copper %	When a CO is not staffed a technician must be dispatched to the CO (assumes the technician will perform a # of functions at the same CO)	=CO_Non_Staffed/Number_of_Orders_Per_Trip*Copper_Percent	20.00	NTEC
64	Travel time within the staffed central office: CO Staffed/ # Orders per Trip* Copper %	This time includes moving from floor to floor within the same building	=CO_Staffed/Number_of_Orders_Per_Trip*Copper_Percent	10.00	NTEC

Step	Task / Activity	Task / Activity Description	Probability Rationale / Formula	Time (Min.)	Rate (Work Center)
65	Travel time within the staffed central office: CO Staffed/ # Orders per Trip* Copper %: "R"	This time includes moving from floor to floor within the same building	=CO_Staffed/Number_of_Orders_Per_Trip*Copper_Percent	10.00	NTEC
66	Travel time within the staffed central office: CO Staffed/ # Orders per Trip* Copper %	FMAC technicians go from frame to frame which are located on different floors of the same building	=CO_Staffed/Number_of_Orders_Per_Trip*Copper_Percent	10.00	FMAC
67	Travel time within the staffed central office: CO Staffed/ # Orders per Trip	FMAC technicians go from frame to frame which are located on different floors of the same building	=CO_Staffed/Number_of_Orders_Per_Trip	10.00	FMAC
68	Travel time to FDI / 2 work activities	This includes the time to travel to the FDI	50%	20.00	SS I&M /OSP
69	Travel time to FDI / 1 work activities	This includes the time to travel to the FDI	100%	20.00	SS I&M /OSP
70	Travel time to customer premises / 1 work activity	This is the time to travel to the customers location	100%	20.00	SS I&M /OSP
71	ELEMENT TYPE DETAIL STEPS				
72	2 WIRE LOOP: Copper				
73	Perform continuity test (check dial tone and ANI)	Before disconnecting from ILEC switch, test for accurate TN.	=Copper_Percent	0.25	FCC
74	Install cross connect from MDF to CFA appearance	Frame technician runs cross connect in CO	=Copper_Percent	1.00	FCC
75	Install cross connect from MDF to CFA appearance	Frame technician runs cross connect in CO	=Copper_Percent*Percent_Non_Dedicated	1.00	FCC
76	Perform continuity	After running new Cross Connect	=Copper_Percent	0.25	FCC

Step	Task / Activity	Task / Activity Description	Probability Rationale / Formula	Time (Min.)	Rate (Work Center)
	test (check dial tone and ANI)	perform continuity test and ANI.			
77	ILEC MLT test and or ISTF test	ILEC performs MLT and ISTF test	=Copper_Percent		
78	CLEC MLT test and or ISTF test	CLEC performs it's own MLT and ISTF test	NA	NA	NA
79	Remove jumper from MDF	Frame technician removes cross connect jumper that connects to ILEC switch	=Copper_Percent	0.50	FCC
80	Remove jumper from MDF	Frame technician removes cross connect jumper that connects to ILEC switch	=Copper_Percent	0.50	FCC
81	2 WIRE LOOP: IDLC (GR-303)				
82	Install DSO TSI at RT (CPU time)	This is CPU time only and is done by OPS/INE to the INE at the RT	=Fiber_Percent	-	
83	NCTE installation and testing	ILEC I&M Technician tests circuit	100%	2.00	
84	Remove DSO TSI at RT (CPU Time)	This is CPU time only and is done by OPS/INE to the INE at the RT	=Fiber_Percent	-	
85	CHANNELIZED DS1 CAPACITY FOR THE VRT (TR-303)				
86	Install IDT line port card	Place card in LDS	100%	2.00	SCC
87	Install DSX cross connect (5 Wire)	Technician places the 5 wire cross connect at the DSX frame in the CO to the CLEC collocation.	100%	10.00	FMAC
88	Perform remote quasi random signaling source (QRSS) test via remote ITS - DTAU	TL1 command sent from ITS	100%	5.00	FMAC
89	Remove DSX cross	Technician removes the 5 wire cross	100%	10.00	FMAC

Step	Task / Activity	Task / Activity Description	Probability Rationale / Formula	Time (Min.)	Rate (Work Center)
	connect (5 Wire)	connect at the DSX frame			
90	CPU time at SONET MUX (DS1)	This is CPU time only and is done by OPS/INE in the CO	100%		
91	CPU time at RT (DS1 TSI)	This is CPU time only and is done by OPS/INE at the RT	100%		
92	Perform remote quasi random signaling source (QRSS) test via remote ITS-DTAU	TL1 command sent from ITS	100%	5.00	FMAC
93	CPU Time at SONET MUX (DS1)	This is CPU time only and is done by OPS/INE in the CO	100%		
94	CPU Time at RT (DS1 TSI)	This is CPU time only and is done by OPS/INE at the RT	100%		
95	Remove DSX cross connect (5 Wire)	Technician removes the 5 wire cross connect jumper at the DSX frame in the CO	100%	10.00	FMAC
96	FIBER CROSS CONNECT				
97	Install 2 Fiber cross connects at LGX (2 min X 2 Fiber cross connects at LGX)	This functions is performed by FMAC Technician.	100%	4.00	FMAC
98	Remove 2 Fiber cross connects at LGX (2 min X 2 Fiber cross connects at LGX)	This function is performed by FMAC Technician.	100%	4.00	FMAC
99	OTDR (Optical Time Domain Reflecometer) testing using Fiber Check 5000 type system	This function is performed when a fiber cross connect is tested. NMA/ITS CPU Time	100%		
100	2 WIRE CROSS	The 2 wire Cross Connect that is done			

Step	Task / Activity	Task / Activity Description	Probability Rationale / Formula	Time (Min.)	Rate (Work Center)
	CONNECT AT THE FDI	at the Feeder Distribution Interface			
101	Setup time / 2 work activities	This includes setting safety cones, opening FDI, getting required tools	50%	10.00	SS I&M /OSP
102	Perform continuity test for ILEC	This test is done to insure that the correct Cross Connects are identified	100%	0.25	SS I&M /OSP
103	Install cross connect (Binding Post)	Perform Cross Connect functions using Binding Posts	100%	2.00	SS I&M /OSP
104	Tear down setup / 2 work activities	This function is performed by the Installation Technician and entails closing the Cross Connect box, replacing tools, and collecting safety cones	50%	10.00	SS I&M /OSP
105	Setup time / 2 work activities	This includes setting safety cones, opening FDI, getting required tools	50%	10.00	SS I&M /OSP
106	Perform continuity test for ILEC	When the Cross Connect is completed, a continuity test is performed	100%	0.25	SS I&M /OSP
107	Remove existing cross connect (Binding Post)	Disconnect performed at Binding Post	100%	1.00	SS I&M /OSP
108	Tear down setup / 2 work activities	This function is performed by the Installation Technician and entails closing the Cross Connect box replacing tools and collecting safety cones	50%	10.00	SS I&M /OSP
109	4 WIRE CROSS CONNECT AT THE FDI	The 4 wire Cross Connect that is done at the Feeder Distribution Interface by the Installation Technician			
110	Negotiate customer release (CLEC to ILEC)	SSC contacts the customer (CLEC) to negotiate a time when service can be interrupted.	100%	15.00	SSC
111	Setup time / 1 work activity	This includes setting safety cones, opening FDI, getting required tools	100%	10.00	SS I&M /OSP
112	Install cross connect	This is connecting a Cross Connect at	100%	4.00	SS I&M /OSP

Step	Task / Activity	Task / Activity Description	Probability Rationale / Formula	Time (Min.)	Rate (Work Center)
	(Binding Post)	the FDI			
113	Tear down setup / 1 work activity	This function is performed by the Installation Technician and entails closing the Cross Connect box replacing tools and collecting safety cones	100%	10.00	SS I&M /OSP
114	Remove SMAS (wire wrap)	CO technician performs wire wrap disconnects in order to disconnect the SMAS points	=Copper_Percent	6.00	NTEC
115	Remove cross connect from MDF (Cosmic-like frame, e.g. punch down, 2 four wire)	Frame technician removes cross connect jumper that connects to ILEC switch	=Copper_Percent	2.00	NTEC
116	Setup time / 2 work activities	This includes setting safety cones, opening FDI, getting required tools	50%	10.00	SS I&M /OSP
117	Remove existing cross connect (Binding Post)	Disconnect performed at Binding Post	100%	4.00	SS I&M /OSP
118	Tear down setup / 2 work activities	This function is performed by the Installation Technician and entails closing the Cross Connect box replacing tools and collecting safety cones	50%	10.00	SS I&M /OSP
119	4 WIRE LOOP and OTHER DESIGNED SERVICES				
120	Negotiate customer release (CLEC to ILEC)	SSC contacts the customer (CLEC) to negotiate a time when service can be interrupted	100%	15.00	SSC
121	Monitor circuit for traffic busy and correct assignment	NTEC technician bridges on circuit to insure no traffic on line and that the correct line is being worked on	=Copper_Percent	1.00	NTEC
122	Monitor circuit for traffic busy and	FMAC technician bridges on circuit to insure no traffic on line and that the	100%	1.00	FMAC

Step	Task / Activity	Task / Activity Description	Probability Rationale / Formula	Time (Min.)	Rate (Work Center)
	correct assignment	correct line is being worked on			
123	NTEC contacts SSC to verify valid disconnect	NTEC technician contacts the SSC to ensure that the circuit is ready for disconnect	=Copper_Percent	1.50	NTEC
124	SS I&M OSP contacts SSC to verify valid disconnect	SS I&M / OSP technician contacts the SSC to ensure that the circuit is ready for disconnect	100%	1.50	SS I&M /OSP
125	Install cross connect MDF (COSMIC-like frame, e.g. punch-down, 1 four wire jumper)	NTEC technician runs cross connect in CO	=Copper_Percent	2.00	NTEC
126	Remove cross connect MDF (COSMIC-like frame, e.g. punch-down, 1 four wire jumper)	NTEC technician disconnects jumper in CO	=Copper_Percent	1.00	NTEC
127	Install cross connect MDF (COSMIC-like frame, e.g. punch-down, 2 four wire jumpers)	NTEC technician runs cross connect in CO	=Copper_Percent	4.00	NTEC
128	Remove cross connect MDF (COSMIC-like frame, e.g. punch-down, 2 four wire jumpers)	NTEC technician disconnects jumper in CO	=Copper_Percent	2.00	NTEC
129	Perform continuity test (check dial tone and ANI)	When the Cross Connect is completed, a continuity test is performed	=Copper_Percent	0.25	NTEC
130	Install cross connect MDF (COSMIC-like frame, e.g. punch-down, 2 wire jumpers)	NTEC technician runs cross connect in CO	=Copper_Percent	2.00	NTEC

Step	Task / Activity	Task / Activity Description	Probability Rationale / Formula	Time (Min.)	Rate (Work Center)
131	Install cross connect (2 wire wrap, to AD4 ADTS Channel Bank / unitized SMAS)	NTEC technician runs cross connect in CO	=Copper_Percent	1.50	NTEC
132	Remove (2 wire wrap to AD4 ADTS Channel Bank / unitized SMAS)	NTEC technician disconnects jumper in CO	=Copper_Percent	1.50	NTEC
133	Install channel unit at AD4 (Z Office)	NTEC places channel unit in AD4 bank	=Copper_Percent	2.00	NTEC
134	DCS CPU Time (A Office)	CPU Time	=Copper_Percent		
135	Install CSU/DSU at STP		100%	2.00	SCC
136	Remove cross connect (COSMIC-like frame, e.g. punch-down, 2 four wire jumpers)	NTEC technician disconnects jumpers in CO	=Copper_Percent	2.00	NTEC
137	Install cross connect (4 wire wrap to AD4 Channel Bank / unitized SMAS)	NTEC technician disconnects jumpers in CO	=Copper_Percent	3.00	NTEC
138	Remove cross connect (4 wire wrap to AD4 Channel Bank / unitized SMAS)	NTEC technician runs cross connect in CO	=Copper_Percent	3.00	NTEC
139	Install DSX cross connect (5 wire)	FMAC technician connects jumpers in CO	100%	10.00	FMAC
140	Remove DSX wire cross connect (5 wire, existing ILEC service)	NTEC technician disconnects jumpers in CO	100%	10.00	FMAC
141	Remove DSX cross connect (5 wire)	FMAC technician disconnects jumpers in CO	100%	10.00	FMAC
142	Perform remote quasi	TL1 command sent from ITS	100%	5.00	FMAC

Step	Task / Activity	Task / Activity Description	Probability Rationale / Formula	Time (Min.)	Rate (Work Center)
	random signaling source (QRSS) test via remote ITS - DTAU				
143	Install plug-in at RT	FMAC places plug-in at Remote Terminal	=Fiber_Percent	2.00	FMAC
144	Install plug-in at ADM	FMAC technician places plug-ins at Add Drop Mux	=Fiber_Percent	2.00	FMAC
145	Install DS1 Smart Jack (Intelligent RJ48)	I&M Technician installs RJ48 jack at customer premise	100%	2.00	FMAC
146	Install cross connect (4 wire SMAS, wire wrap)	NTEC technician performs wire wrap connections in order to connect the SMAS points	=Copper_Percent	6.00	NTEC
147	Perform DDS testing	SSC performs test	100%	15.00	SSC
148	Perform loop back analysis test	SSC performs test	100%	5.00	SSC
149	Perform DDS latching loop back test	SSC performs test	100%	5.00	SSC
150	Perform testing (1000 Hz.)	SSC performs test	=Copper_Percent	1.00	SSC
151	Perform continuity test (check dial tone and ANI)	When the Cross Connect is completed, a continuity test is performed	=Copper_Percent	0.25	NTEC
152	Perform testing (loss, noise, 3-tone slope, loopback, etc.)	SSC coordinates testing	=Copper_Percent	8.00	SSC
153	Remove SMAS (wire wrap)	NTEC technician performs disconnect to the SMAS points	=Copper_Percent	6.00	NTEC
154	Remove SMAS (wire wrap)	NTEC technician performs disconnect to the SMAS points	=Copper_Percent	6.00	NTEC
155	Remove cross connect from MDF (COSMIC-like frame, e.g. punch-down, 2 four wire)	NTEC technician disconnects jumpers in CO	=Copper_Percent	2.00	NTEC

Step	Task / Activity	Task / Activity Description	Probability Rationale / Formula	Time (Min.)	Rate (Work Center)
156	Remove cross connect from MDF (COSMIC-like frame, e.g. punch-down, 2 four wire)	NTEC technician disconnects jumpers in CO	=Copper_Percent	2.00	NTEC
157	SIMPLE CROSS CONNECT AT THE NID	This Cross Connect is done at the customer premise Network Interface Device			
158	Customer contact to gain access	I&M Technician contacts customer to gain access to premises	100%	3.00	SS I&M /OSP
159	Setup time / 1 work activity	Technician sets up cones at customer premise	100%	10.00	SS I&M /OSP
160	Rearrange cross wire at NID	Rearrange wiring and perform the Cross Connect function	100%	2.00	SS I&M /OSP
161	Perform continuity test (check dial tone and ANI)	After the wiring is rearranged the Installation Technician conducts test	100%	0.25	SS I&M /OSP
162	Tear down set up / 1 work activity	This function is performed by the Installation Technician and entails replacing tools, and collecting safety cones	100%	10.00	SS I&M /OSP
163	DS3 FACILITIES (Loop and Transport)				
164	Install card for DCS	Install plug-in card	25%	2.00	FMAC
165	Perform DSX3 cross connect	FMAC technician makes cross connections	100%	6.00	FMAC
166	Install card for SONET MUX (high speed - OC48 to STS1 or DS3)	Install plug-in card	100%	2.00	FMAC
167	Install card for SONET MUX (high speed - OC48 to STS1 or DS3)	Install plug-in card	100%	2.00	FMAC

Step	Task / Activity	Task / Activity Description	Probability Rationale / Formula	Time (Min.)	Rate (Work Center)
168	Electronic cross connect on DCS	CPU time at the DCS	100%		
169	Electronic disconnect on DCS	CPU time at the DCS	100%		
170	Electronic cross connect on SONET MUX	CPU time at the MUX	100%		
171	Electronic cross connect on SONET MUX		100%		
172	Perform remote PRSB15 test	Perform remote PRSB15 test via ITS and external signaling source	100%	5.00	FMAC
173	Performance monitoring testing	This function includes setting up for the test and all associated criteria, monitoring the test	95%		
174	Retrieve and analyze performance monitoring data	The function includes setting up the PM testing capability and routing to the PM center	100%		
175	Intrusive Test (ITS)	This a 15 minute,30 minute, or 1 hour test and monitoring	5%		
176	CPU time for registers	CPU processing time	1%		
177	DS1 INTEROFFICE TRANSPORT				
178	Install card for DCS	Install plug-in card	25%	2.00	FMAC
179	Install card for SONET MUX (high speed - OC48 to STS1 or DS3)	Install plug-in card	100%	2.00	FMAC
180	Install plug in for low speed DS1 (low speed STS1 to DS1)	Install plug-in card	25%	2.00	FMAC
181	Electronic cross connect on DCS	CPU time at the DCS	100%		

Step	Task / Activity	Task / Activity Description	Probability Rationale / Formula	Time (Min.)	Rate (Work Center)
182	Electronic disconnect on DCS	CPU time at the DCS	100%		
183	Electronic cross connect on low speed DS1 (low speed DS1)	CPU time at the DS1 cross connect	100%		
184	Electronic disconnect on low speed DS1 (low speed DS1)	CPU time at the DS1 cross connect	100%		
185	Perform remote quasi random signaling source (QRSS) test via remote ITS -DTAU	Keep alive signal applied to prevent alarms from activating	100%	5.00	FMAC
186	Performance monitoring testing	The function includes setting up the PM testing capability and routing to the PM center	Results from 95% of initial tests are acceptable. - SME		
187	Install CSU/DSU at STP	Install plug-in equipment	100%	2.00	SCC
188	Retrieve and analyze performance monitoring data	This function includes setting up for the test and all associated criteria monitoring the test	100%		
189	Perform SS7 test	Overall continuity test	100%	15. 00	SCC
190	Intrusive Test (ITS)	This a 15 minute, 30 minute, or 1 hour performance test and monitoring	Unacceptable results from initial test (5% of time) require intrusive tests - SME		
191	CPU time for registers	Internal system performance monitoring and calculations	1% require investigation. SME		
192	SS7 STP GLOBAL TITLE TRANSLATIONS				
193	Build global title translations - service level (input into SEAS / NET PILOT)	Input GTT into SEAS	100%	30.00	SCC
194	SS7 STP MESSAGE				

Step	Task / Activity	Task / Activity Description	Probability Rationale / Formula	Time (Min.)	Rate (Work Center)
	TRANSFER PART				
195	Build MTP point code to link set translations	Build MTP to point code to link set translation at ILEC STP	100%	15.00	SCC
196	Insert translations to perform diagnostics and place in available and in-service state	Perform translations remotely via SEAS / NET PILOT	100%	5.00	SCC
197	Insert translations to place in an out-of-service and available state	Perform translations remotely via SEAS / NET PILOT	100%	4.00	SCC
198	FALL OUT STEPS				
199	Fall Out: RMAs forwarded to PAWS for reconciliation	Some orders are cleared by PAWS while others require RMA	=FO_POTS		
200	Fall Out: Pull and analyze order: RCMAC	This entails analyzing the order and manually clearing the RMA and re-entering the order back into the mechanized process.	=FO_POTS	2.50	RCMAC
201	Fall Out: Resolve fallout: RCMAC	RCMAC clears jeopardy	=FO_POTS	15.00	RCMAC
202	Fall Out: RMA's forwarded to PAWS for reconciliation	CPU	=FO_POTS		
203	Fall Out: Pull and analyze order: LAC	LAC analyzes the order and makes corrections	=FO_POTS	2.50	LAC
204	Fall Out: Resolve fallout: LAC	LAC updates LFACS	=FO_POTS	15.00	LAC
205	Fall Out: Pull and analyze order: CPC	CPC analyzes order	=FO_Complex	2.50	CPC
206	Fall Out: Resolve fallout: CPC	CPC resolves problems with order	=FO_Complex	30.00	CPC
207	Fall Out: Pull and analyze order: SCC	SCC analyzes order	=FO_Complex	2.50	SCC

Step	Task / Activity	Task / Activity Description	Probability Rationale / Formula	Time (Min.)	Rate (Work Center)
208	Fall Out: Resolve Fallout: SCC	SCC resolves problem with order	=FO_Complex	15.00	SCC
209	CLOSE ORDER STEPS				
210	Close order: FCC: Copper%	Technician closes order in SWITCH which sends information to SOAC, SOAC sends SOP completion information.	=Copper_Percent	1.50	FCC
211	Close order: FCC: Copper %*(%_Non_Dedicated	Technician closes order in SWITCH which sends information to SOAC, SOAC sends SOP completion information.	=Copper_Percent*Percent_Non_Dedicated	1.50	FCC
212	Close Order: FMAC	WFA/DI notifies TIRKS which sends completion to SOAC, SOAC sends SOP completion notice.	100%	1.50	FMAC
213	Close Order: SS I&M/OSP	WFA/DO notifies SOP of completion, SOP notifies SOAC of completion	100%	1.50	SS I&M /OSP
214	Close Order: NTEC: Copper %	WFA/DI notifies WFA/C and sends completion to TIRKS which notifies SOAC and updates SOP completion notice	=Copper_Percent	1.50	NTEC
215	Close Order: NTEC	WFA/DI notifies WFA/C and sends completion to TIRKS which notifies SOAC and updates SOP completion notice	100%	1.50	NTEC
216	Close Order: SSC	WFA/DI notifies WFA/C and sends completion to TIRKS which notifies SOAC and updates SOP completion notice	100%	1.50	SSC
217	CLOSE ORDER PROVISIONING STEPS				
218	SOAC updates SOP		100%		
219	SOP updates, WFA,		100%		

Step	Task / Activity	Task / Activity Description	Probability Rationale / Formula	Time (Min.)	Rate (Work Center)
	NSDB, LMOS, BOSS, CRIS, etc.				
220	SOAC updates WFA, NSDB, and CABS		100%		
221	SOP completes LSR	ILEC Service Order Processor updates the Customer Service Record and LSR to complete status.	100%	-	
222	ILEC gateway notifies CLEC of completed order		NA	NA	NA
223	ILEC billing system issues final bill to migrating customer		NA	NA	NA
224	END OF PROCESS STEPS				
225	LAST LINE				

NTAB

Attachment C

NRCM TECHNICAL ASSUMPTIONS BINDER
WORKING DRAFT IN PROGRESS

Attachment C

Acronyms

ADM	Add Drop Multiplexer
ADTS	Automated Digital Terminal System
AIN	Advanced Intelligent Network
ALI	Automated Location Identifier
ANI	Automatic Number Identification
ANSI	American National Standards Institute
APC	Automatic Protection Switch Counts
ASR	Access Service Request
BCR	Bell Communications Research
BER	Bit Error Rate
BLV	Busy Line Verify
BLVI	Busy Line Verify and Interrupt
BNF	Basic Network Functions
CB	Channel Bank
CEV	Controlled Environmental Vault
CFA	Connecting Facility Assignment
CIT	Craft Interface Terminal
CLEC	Competitive Local Exchange Carrier
CO	Central Office
COT	Central Office Terminal
CPE	Customer Premises Equipment
CP	Cable Pair
CRV	Call Reference Value
CRC	Cyclical Redundancy Check
DA	Directory Assistance
DB	Data Base

NRCM TECHNICAL ASSUMPTIONS BINDER
WORKING DRAFT IN PROGRESS

Attachment C

DCS/EDSX	Digital Cross-connect System/Electronic Digital Signal Crossconnect
DDS	Digital Data Services
DIP	Dedicated Inside Plant
DID	Direct Inward Dialing
DMS	Digital Multiplexing System
DNRI	Directory Number Route Index
DLC	Digital Loop Carrier
DOP	Dedicated Outside Plant
DSX	Digital Signal Cross-Connect
DS0	Digital Signal Zero (64 Kb/s)
DS1	Digital Signal One (1.544 Mb/s)
EICT	Expanded Interconnect Channel Termination
ES	Error Seconds
ESS	Electronic Switching System
FITL	Fiber In The Loop
FG	Feature Group
GNE	Gateway Network Element
HDT	Host Digital Terminal
IDLC	Integrated Digital Loop Carrier
IDT	Integrated Digital Terminal
ILEC	Incumbent Local Exchange Carrier
IOF	Interoffice Facility
INE	Intelligent Network Element
LCC	Line Class Code
LDS	Local Digital Switch
LEC	Local Exchange Company
LEN	Line Equipment Number

NRCM TECHNICAL ASSUMPTIONS BINDER
WORKING DRAFT IN PROGRESS

Attachment C

LERG	Local Exchange Routing Guide
LIDB	Line Information Data Base
LNP	Local Number Portability
LRN	Location Routing Number
LSR	Local Service Request
LSOG	Local Service Ordering Guide
LTE	Line Terminating Equipment
MDF	Main Distributing Frame
MFT	Metallic Facility Terminal
NCTE	Network Channel Terminating Equipment
NE	Network Element
NI	Network Interface
NID	Network Interface Device
NCTE	Network Channel Terminating Equipment
NOC	Network Operations Center
NPA	Numbering Plan Area
NRC	Non-Recurring Charges
OAM&P	Operations, Administration, Maintenance, and Provisioning
OSPS	Operator Services Position System
OC	Optical Carrier
OCU	Office Channel Unit
OE	Office Equipment
O/E	Optical to Electrical
OSI/CMISE	Open Systems Interface/Common Management Interface Service Element
OS	Operator Services
OSS	Operational Support Systems
PCNE	Processor Controlled Network Element

NRCM TECHNICAL ASSUMPTIONS BINDER
WORKING DRAFT IN PROGRESS

Attachment C

PIC	Preferred Inter-exchange Carrier
PLOC	Preferred Local Carrier
PSAP	Public Safety Answering Point
QOR	Query On Release
RC	Recurring Charge
RCF	Remote Call Forwarding
RIPH	Route Index Portability Hub
RI	Route Indexing
RJ	Registered Jack
RSM	Remote Switching Module
RT	Remote Terminal
SCP	Service Control Point
SES	Severely Errored Seconds
STP	Signal Transfer Point
SDV	Switched Digital Video
SONET	Synchronous Optical Network
SS	Special Services
STS	Synchronous Transport Signal
SPCNE	Stored Program Control Network Element
TL1	Transaction Language One
TMN	Telecommunication Management Network
TR	Technical Reference
TSI	Timeslot Interchanger
TSR	Total Service Resale
UAS	Unavailable Seconds
UDLC	Universal Digital Loop Carrier
UI	User Interface

NRCM TECHNICAL ASSUMPTIONS BINDER
WORKING DRAFT IN PROGRESS

Attachment C

UNE	Unbundled Network Elements
VF	Voice Frequency
VT	Virtual Tributary

**Before the
Federal Communications Commission
Washington, D.C. 20554**

**In the Matter of
Petition of AT&T Communications
of Virginia, Inc., Pursuant
to Section 252(e)(5) of the
Communications Act, for Preemption
of the Jurisdiction of the Virginia
State Corporation Commission
Regarding Interconnection Disputes
with Verizon-Virginia, Inc.**

CC Docket No. 00-251

**In the Matter of
Petition of WorldCom, Inc. Pursuant
to Section 252(e)(5) of the
Communications Act for Expedited
Preemption of the Jurisdiction of the
Virginia State Corporation Commission)
Regarding Interconnection Disputes
with Verizon-Virginia, Inc., and for
Expedited Arbitration**

CC Docket No. 00-218

CERTIFICATE OF SERVICE

I hereby certify that on this 2nd day of July, 2001, a copy of the cost studies of AT&T Communications of Virginia, Inc. and WorldCom, Inc. was sent via hand delivery, overnight mail and/or e-mailed to:

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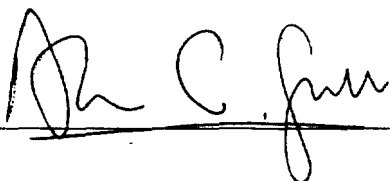
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A handwritten signature in black ink, appearing to read "C. Kane Ronis", is written over a horizontal line.